

3. Notes on the Variegated or Yellow-tailed Rats of Australasia. By Dr. J. E. GRAY, F.R.S., V.P.Z.S., F.L.S., &c.

At the Meeting of this Society for May 8, 1866, I described a large Rat with a black and yellow tail from North Australia, under the name of *Mus macropus**. We have since received another specimen of this Rat from Cape York; and Mr. Gerard Krefft has informed me in a note that it is, evidently the animal which he has proposed to call *Hapalotis caudimaculata* in a paper on Australian animals recently sent to this Society†.

I may add to the former description that the cutting-teeth are bright orange-yellow in front; the front side of the upper one is broad, flat, and smooth, with a narrow, slightly shelving margin on the outer side of each tooth,—and of the lower one narrower, convex, with a single, subcentral, longitudinal, slightly impressed groove.

The fur of this Rat is moderately soft, like that of *Mus rattus*, the longer hairs being rather rigid and bristle-like.

The British Museum has lately received an adult and a young specimen of this Rat in spirits from Cape York. The feet of the young specimen are as white, and, in proportion to the size of the specimen, as thick and fleshy as those of the adult.

The groove in the front of the lower cutting-teeth, the large size and pale colouring of the feet, and the nakedness of the scaly tail seem to indicate a peculiar section in the Rats, which may be called *Gymnomys*.

In the description above quoted I observed that there were two other species of Rat in the British Museum, which had the tails more or less varied with yellow, and that one of them was from North Australia, but that it differed from *M. macropus* in having smaller feet. I might have added that it also differed from *M. macropus* from Cape York in being a spiny-furred Rat.

This Rat also belongs to the section *Gymnomys*. It differs from *M. macropus* in the small size of the cutting-teeth and the feet, and there is also a difference in the colouring of the fur. It was brought from Menado, North Celebes, by Mr. Wallace in 1859.

This specimen might at first be regarded as the young of *M. macropus*; but the size and colour of the feet, as well as the great difference in the fur, at once set at rest such a theory. The hair of the Celebes Rat is much softer and uniform in kind than that of the Rat from North Australia, which is much more rigid, with abundance of elongate black cylindrical hairs; and the shorter fur is made up of soft slender crisp hairs, intermixed with a number of very narrow, slender, linear, rigid, white, flat, channelled hairs.

* P. Z. S. 1866, p. 221.

† [See Mr. Krefft's paper, P. Z. S. 1867, p. 316. The same animal has been more recently described and figured by our Foreign Member Dr. W. Peters under the name *Uromys macropus* (Monatsb. Ac. Berlin, June 1867).—P. L. S.]

MUS (*GYMNOMYS*) *CELEBENSIS*.

Grey brown, with rather rigid blackish longer hairs, most abundant on the middle of the back and rump; sides of the nose, cheeks, chin, middle of the throat, chest, underside of the body, and legs pure white, divided from the dark colour of the upper part of the body by a well-marked line; tail elongate, basal third blackish, the rest yellow; feet slender, brown, covered with short soft hair above; ears rather broad, naked. Length 10 inches, of tail 11 inches, of hind foot about 1 inch 10 lines. (Female.)

Hab. Menado (North Celebes), 1859 (*Wallace*).

Mr. Wallace obtained at Sadong, in Borneo, in 1855, a female Rat similar to the above in size, but varied with yellow and black hairs above, whitish yellow below, and with an entirely black tail. The cutting-teeth are yellow and smooth; the lower one without any indication of a longitudinal groove.

MUS *XANTHURA*. (Yellow-tailed Forest-Rat.)

Fur above yellow grey brown, yellow- and black-washed, especially on the hinder part of the back; sides of nose, cheeks, chin, throat, chest, underside of body, and limbs white; the longer hairs of the back black, rather rigid, those of the hinder part of the back much longer, blacker, and projecting beyond the base of the tail; the hair of the sides of the vent longer, yellow, with some stiffer longer black hairs intermixed; feet dark brown, hairy above; tail elongate, nearly naked, only with a few short hairs near the tip, black at the base for about one-third of its length, the rest yellow; upper cutting-teeth flat and yellow in front; the lower very narrow, rather compressed, white, smooth, without any indication of a central longitudinal groove.

Hab. North Celebes; Tondano (*Wallace*), 1859, female.

Mr. Wallace observes, "This is a forest-rat, eats rice; was taken at an elevation of 3600 feet." The long black hair over the rump has an inclination to form two dark streaks, each ending in a black point on the sides of the base of the tail.

ACANTHOMYS *LEUCOPUS*.

Grey brown above; sides of nose, cheeks, chin, underside of body, and legs white; feet thick, large, white, slightly covered with short close-pressed white hairs; tail elongate, naked, black, with two or more yellow rings. The fur of the back with abundant flat, channelled, spinous hairs, and with a few scattered, elongate, black, cylindrical bristles. The fur of the underside with similar spinous hairs, those on the sides and back being often dark-tipped. The cutting-teeth are yellow and quite smooth in front; the upper ones are flat; the lower ones rather narrow and rounded in front. The ears are nearly naked. The whiskers moderate, slender, flexible, weak. Eyes small.

Hab. North Australia; Cape York (*Mr. Damen*).

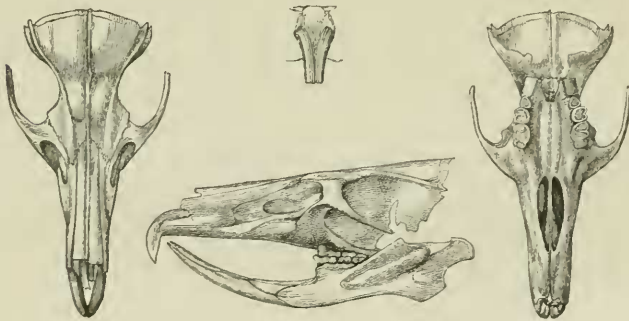
There is an adult female of this species, with four lateral ventral

and two pectoral teats well developed, and a young female in the Museum Collection.

ECHIOTHRIX.

Head elongate. Nose elongate, compressed, concave on the sides; apex produced, acute; underside with short close bristles and a small central groove; nostrils apical, lateral. Fur soft, crisp, with abundance of bristles, flat and channelled at the base, cylindrical and tapering at the tip; those of the under part of the body being white and more slender. Ears nakedish. Feet covered with short adpressed hairs. Tail elongate, cylindrical, nearly bald, with rings of square scales. Skull elongate; face very much produced, elongate, compressed; palate rounded in front, flat behind, with an elongated aperture in the middle of its length, more than twice as long as broad; the hinder part of palate with three equally long longitudinal grooves; nose flat above; nasal bones very long, slender. Cutting-teeth white; upper short, with two well-marked subcentral longitudinal grooves; lower elongated, arched, rather compressed, rounded and smooth in front. Grinders $\frac{3-3}{3-3}$, moderate-sized; the front much the largest; the hinder smallest and subcircular; the front upper rounded on the inner, and with two folds on the outer side; the second upper with one fold on the outer side, the lower front with a slight subcentral fold on the inner side. Crowns of the teeth flat; the front upper with two and the others with a single cross ridge, less distinctly marked in the hinder teeth.

Hab. Australia.



Echiothrix leucura.

The skull is very much longer and more slender than in any species of *Mus* or of *Muridæ* in the Museum Collection. The face is very slender, compressed, flat on the sides and above. The fissure on the side of the nose from the base of the infraorbital foramen is short and small, compared with those in the typical *Muridæ*. The grinders are nearly erect; the crowns of the grinders are worn and concave between the ridges of the enamel.

ECHIOTHRIX LEUCURA.

Fur dark grey brown, varied with black-tipped hairs on the back and sides; sides of nose, cheeks, throat, chest, and underside of limbs white; feet moderate, covered above with dark-brown hair; tail yellow, black at the base; cutting-teeth white; whiskers long, black, rather rigid. Length of body and head $9\frac{1}{2}$ inches; tail imperfect; hind feet about 2 inches.

Hab. Australia; British Museum, male? Tail imperfect.

4. Note on the Eggs of the Australian Stilt-Plover (*Himantopus leucocephalus*). By E. P. RAMSAY, C.M.Z.S.

As nothing seems to have been published upon the nidification of this fine species, I beg leave to offer a few remarks upon the subject. The Stilted Plover must be considered rather a scarce than a rare bird in New South Wales, its visits being few and far between. When it does come, however, which is usually in some very dry or remarkably wet season, it appears in great numbers and in all stages of plumage. In 1865 large flocks arrived, in company with the Straw-necked and White Ibises (*Geronticus spinicollis* and *Threskiornis strictipennis*), and took up their abode in the lagoons and swamps in the neighbourhood of Grafton, on the Clarence River, where, on my visit to that district in September last (1866) all three species were still enjoying themselves.

A few days previously to my arrival in Grafton, a black in the employ of Mr. J. Macgillivray, and a very intelligent collector, discovered a nest of this species containing four eggs, which have been secured for our collection. The nest was a slight structure, consisting merely of a few short pieces of rushes and grass, placed in and around a depression at the foot of a clump of rushes growing near the water's edge of a lagoon in the neighbourhood of South Grafton. The eggs vary slightly in form, two being pyriform, the other two rather long. The ground-colour is of a yellowish olive or light yellowish brown, lighter when freshly taken—in some sparingly, in others thickly blotched and spotted with umber and black, the black spots running together and forming large patches on the thick ends. Length from $1\frac{3}{10}$ inch to $1\frac{7}{10}$ inch; breadth $1\frac{1}{4}$ inch to $1\frac{1}{2}$ inch.

The immature birds have the top and back of the head, back of the neck, and shoulders grey, which parts become black, interspersed with white feathers, before finally reaching the plumage of the adult.